# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of
Proposal for Creation of the Low Power FM (LPFM) Broadcast Service
NPRM MM Docket No. 99-25

#### In SUPPORT of LPFM Service

## • Goals of this Commentary Document

- 1) <u>Establish a "meaningful & affordable" LPFM Service</u>- **50 Watts and up** (not microbroadcasting).
  - Microbroadcasting it is too low of a power level to reach the an acceptable size target audience using conventional low quality receivers usually small portable radios, and other non-PLL based receivers (except for special event / special small coverage service areas such as "park" events during holidays, outdoor plays, drive-in theatres, etc).
- 2) <u>Licensing to be a low cost</u> flat fee (i.e. \$50.00 for 50 100 Watts), and be on a First Come, First served basis, with priority in MX cases given to new broadcasters over established ones.
- 3) <u>Protection from large powerful entities</u> who's agenda is to take over whatever service they can.
  - One Station (maximum) per Person / Organization per Major Geographical Area Organization being defined as either Commercial or Non-commercial (including foundational, etc), with the clear intent of preventing the LPFM class of stations from becoming multiple outlets of a national programming source. An Owner/Operator scenario where the owner/operator essentially does the programming. Note-Hate programming prohibited.
- 4) Acceptance of New Technology Low Cost, "World Class" Broadcast Quality LPFM equipment is now available, which is in most cases, is better than commercial equipment used just 10 years decade ago for "full power" stations.

  With appropriate training & certification in accepted broadcast engineering practices (mentioned later in this comment), many owners / operators could acceptably broadcast either on a self-maintained basis, or obtain affordable engineering service.

## **Engineering Aspects**

LPFM service at 50 - 100 Watts

### Should not warrant "type classed" equipment if:

- PLL referenced & properly filtered & tested equipment obtained from a reputable vendor such as Veronica FM or Broadcast Warehouse,
   AND
- The operator passes some basic but essential RF engineering criteria, AND

• The operator has the necessary test & measure equipment (i.e spectrum analyzer, frequency counter, power meters, etc) on site and/or on-line to monitor and verify proper operation on an ongoing basis as well as during an inspection.

New and emerging technologies for RF spectrum analysis such as "Winradio" ® are affordable for the 50 - 100 Watt LPFM broadcaster and are more than adequate RF diagnostic tools for finding "spurs", "harmonics" & etc., for this service/power level (expensive equipment such as a commercial spectrum analyzer is not necessary). Professional quality engineered kits are also available and would also be permitted. Such kits are provided with the same full specs and documentation for proper operation & maintenance as turn-key equipment. However, "home-brew" equipment acceptance is not recommended.

Allocations/Spacing from full power stations

Second adjacent channel allocation

First adjacent channel allocation spacing of 35 miles\*

Co channel spacing of 75 miles\*

\* if acceptable reception can be achieved for the LPFM - this poses no problem for the full power station

#### Conclusion:

Acceptable/quality broadcast operating practice cannot be "cheap", but also <u>cannot cost a</u> "fortune".

#### Provided as:

- As a Secondary Service and subject to less stringent operation (maintenance & service area coverage) & programming (on air) requirements. However, this is intended to be professional broadcasting and not a hit and miss hobby.
- As a Secondary Service less operation & programming requirements, perhaps time sharing of channels (i.e. school/educational in daytime, community broadcaster at night)
- Conceptually follow Skinner's LPFM-2, LPFM-3, LPFM-4 descriptions with the variations mentioned earlier.

## <u>LPFM</u> Service at **101W** and up via (Skinner's Recommendation)

- Primarily Commercial Based in the traditional sense, and "can" be Community based
- should require "type classed" equipment. (due its higher power and increased equipment engineering complexity)
- as described by Skinner's LPFM-1 description

Sincerely,

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